

LISTING OF THE CLAIMS

1. (Previously Presented): A multi-domain liquid crystal display device, comprising:
 - first and second substrates;
 - data and gate lines on the first substrate in first and second directions to define a plurality of pixel regions;
 - a single pixel electrode in each pixel region, wherein each pixel region has first and second sub-pixel regions and each of the first and second sub-pixel regions has at least one slit pattern in the single pixel electrode;
 - a first electrode and a second electrode on the first substrate, the first and second electrodes forming a storage capacitor;
 - a common electrode on the second substrate;
 - a light shielding layer on the common electrode, the light shielding layer serving as a dielectric frame for the multi-domain and substantially surrounding each pixel region as well as the first and second sub-pixel regions; and
 - a liquid crystal layer between the first and second substrates, wherein the liquid crystal layer in the first sub-pixel region aligns differently from the liquid crystal layer in the second sub-pixel region when a voltage is applied between the single pixel electrode and the common electrode.
2. (Original): The device of claim 1, further comprising a TFT in a crossing portion between the data and gate lines.
3. (Original): The device of claim 1, wherein the dielectric frame is black resin.
4. (Original): The device of claim 1, wherein the dielectric frame includes a material having dielectric anisotropy equal to or smaller than that of the liquid crystal layer.
5. (Original): The device of claim 1, wherein the dielectric frame includes photoacrylate or Benzocyclobutene(BCB).
6. (Previously Presented): The device of claim 1, further comprising color filter layers on the second substrate.

7. (Original): The device of claim 1, further comprising a phase difference film on at least one of the first and second substrates.

8. (Original): The device of claim 1, further comprising an alignment film on at least one of the first and second substrates.

9. (Original): The device of claim 1, wherein the liquid crystal layer includes a chiral dopant.

10. (Previously Presented): A multi-domain liquid crystal display device, comprising:

first and second substrates;

data and gate lines on the first substrate in first and second directions to define a plurality of pixel regions;

a single pixel electrode in each pixel region, wherein each pixel region has first and second sub-pixel regions and each of the first and second sub-pixel regions has at least one hole in the single pixel electrode;

a first electrode and a second electrode on the first substrate, the first and second electrodes forming a storage capacitor;

a common electrode on the second substrate;

a light shielding layer on the common electrode, the light shielding layer serving as a dielectric frame for the multi-domain and substantially surrounding each pixel region as well as the first and second sub-pixel regions; and

a liquid crystal layer between the first and second substrates, wherein the liquid crystal layer in the first sub-pixel region aligns differently from the liquid crystal layer in the second sub-pixel region when a voltage is applied between the single pixel electrode and the common electrode.

11. (Original): The device of claim 10, wherein the dielectric frame is black resin.

12. (Original): The device of claim 10, wherein the dielectric frame includes photoacrylate or benzocyclobutene (BCB).

13. (Original): The device of claim 10, further comprising a phase difference film on at least one of the first and second substrates.

14. (Original): The device of claim 10, further comprising an alignment film on at least one of the first and second substrates.

15. (Original): The device of claim 10, wherein the liquid crystal layer includes a chiral dopant.

16. (Previously Presented): A multi-domain liquid crystal display device, comprising:

- first and second substrates;

- data and gate lines on the first substrate in first and second directions to define a plurality of pixel regions;

- a U shaped TFT at a crossing portion of the data and gate lines;

- a single pixel electrode in each pixel region, wherein each pixel region has first and second sub-pixel regions and each of the first and second sub-pixel regions has at least one hole or slit pattern in the single pixel electrode;

- a first electrode and a second electrode on the first substrate, the first and second electrodes forming a storage capacitor;

- a common electrode on the second substrate;

- a light shielding layer on the common electrode, the light shielding layer serving as a dielectric frame for the multi-domain and substantially surrounding each pixel region as well as the first and second sub-pixel regions; and

- a liquid crystal layer between the first and second substrates, wherein the liquid crystal layer in the first sub-pixel region aligns differently from the liquid crystal layer in the second sub-pixel region when a voltage is applied between the single pixel electrode and the common electrode.

17. (Original): The device of claim 16, wherein the dielectric frame is black resin.

18. (Original): The device of claim 16, wherein the dielectric frame includes photoacrylate or benzocyclobutene (BCB).

19. (Original): The device of claim 16, wherein the TFT includes:

- a gate electrode on the first substrate;
- a gate insulating film on the first substrate;
- a semiconductor layer and an ohmic contact layer on the gate insulating film; and
- a drain electrode on the ohmic contact layer and a source electrode surrounding the drain electrode in a U shape.

20. (Original): The device of claim 16, wherein the liquid crystal layer includes a chiral dopant.

21. (Withdrawn): A method for manufacturing a multi-domain liquid crystal display device comprising:

- forming gate and data lines on a first substrate, the data lines being formed to cross the gate lines;
- forming a passivation film on the first substrate;
- forming a transparent conductive film on the passivation film;
- patterning the transparent conductive film to form a pixel electrode having at least one slit in a pixel region defined by the gate and data lines;
- forming a dielectric frame within the pixel region to define a plurality of domains, the dielectric frame on a second substrate opposite to the first substrate; and
- forming a liquid crystal layer between the first and second substrates.

22. (Withdrawn): The method of claim 21, wherein the step of forming the pixel electrode includes the step of patterning the transparent conductive film using a mask provided with at least one slit.

23. (Withdrawn): The method of claim 21, wherein the slits are formed in different directions within each domain as the plurality of domains are defined.

24. (Withdrawn): The method of claim 21, wherein the dielectric frame is formed of black resin.

25. (Withdrawn): The method of claim 21, wherein the dielectric frame includes photoacrylate or benzocyclobutene (BCB).

26. (Withdrawn): The method of claim 21, wherein the step of forming the liquid crystal layer includes:

- forming a sealing pattern on the first substrate;
- selectively dropping a liquid crystal within the sealing pattern;
- distributing a spacer on the second substrate;
- attaching the first and second substrate to each other; and
- hardening the sealing pattern by ultraviolet light.

27. (Withdrawn): The method of claim 21, wherein the liquid crystal layer includes a chiral dopant.

28. (Withdrawn): A method for manufacturing a multi-domain liquid crystal display device comprising:

- forming gate and data lines on a first substrate, the data lines being formed to cross the gate lines;
- forming a passivation film on the first substrate;
- forming a transparent conductive film on the passivation film;
- patterning the transparent conductive film to form a pixel electrode having at least one hole in a pixel region defined by the gate and data lines;
- forming a dielectric frame within the pixel region to define a plurality of domains, the dielectric frame on a second substrate opposite to the first substrate; and
- forming a liquid crystal layer between the first and second substrates.

29. (Withdrawn): The method of claim 28, wherein the step of forming the pixel electrode includes patterning the transparent conductive film using a mask provided with at least one hole.

30. (Withdrawn): The method of claim 28, wherein the dielectric frame is formed of black resin.

31. (Withdrawn): The method of claim 28, wherein the dielectric frame includes photoacrylate or benzocyclobutene (BCB).

32. (Withdrawn): The method of claim 28, wherein the step of forming the liquid crystal layer includes:

- forming a sealing pattern on the first substrate;
- selectively dropping a liquid crystal within the sealing pattern;
- distributing a spacer on the second substrate;
- attaching the first and second substrate to each other; and
- hardening the sealing pattern by ultraviolet light.

33. (Withdrawn): The method of claim 28, wherein the liquid crystal layer includes a chiral dopant.

34. (Withdrawn): A method for manufacturing a multi-domain liquid crystal display device comprising:

- forming a TFT on a first substrate;
- forming a pixel electrode having a plurality of holes or slits on an entire surface including the TFT;
- forming a dielectric frame within the pixel electrode to define a plurality of domains, the dielectric frame on a second substrate opposite to the first substrate; and
- forming a liquid crystal layer between the first and second substrates.

35. (Withdrawn): The method of claim 34, wherein the step of forming the TFT includes:

- forming a gate electrode on the first substrate;
- forming a gate insulating film on the first substrate;
- forming a semiconductor layer and an ohmic contact layer on the gate insulating film;

and

- forming a drain electrode on the ohmic contact layer and a source electrode surrounding the drain electrode in a U shape.

36. (Withdrawn): The method of claim 34, wherein the dielectric frame is formed of black resin.

37. (Withdrawn): The method of claim 34, wherein the dielectric frame includes photoacrylate or benzocyclobutene (BCB).

38. (Withdrawn): The method of claim 34, wherein the step of forming the liquid crystal layer includes:

- forming a sealing pattern on the first substrate;
- selectively dropping a liquid crystal within the sealing pattern;
- distributing a spacer on the second substrate;
- attaching the first and second substrate to each other; and
- hardening the sealing pattern by ultraviolet light.

39. (Withdrawn): The method of claim 34, further comprising forming a first electrode and a second electrode on the first substrate, the first and second electrodes forming a storage capacitor.

40. (Withdrawn): The method of claim 39, wherein the pixel electrode is electrically connected with the second electrode of the storage capacitor.

41. (Withdrawn): The method of claim 39, wherein the first electrode is formed with the gate electrode.

42. (Withdrawn): The method of claim 39, wherein the step of forming the TFT includes:

- forming a gate electrode on the first substrate;
- forming a gate insulating film on the first substrate;
- forming a semiconductor layer and an ohmic contact layer on the gate insulating film;
- forming a drain electrode on the ohmic contact layer and a source electrode surrounding the drain electrode in a U shape; and
- wherein the second electrode is formed with the source and drain electrodes.

43. (Withdrawn): The method of claim 34, wherein the liquid crystal layer includes a chiral dopant.